



Description

Bulletin 802T limit switches are ideal for applications in which heavy duty pilot ratings, small size, a high degree of versatility and a rugged NEMA Type 4, 13 and 6P^① construction are desirable. An important factor in the automation of industry, these limit switches are being applied extensively on conveyor systems, transfer machines, automatic turret lathes, milling and boring machines, radial drills, and many other types of modern, high speed production equipment.

A wide variety of operating heads and operating levers are available. Operating heads can be mounted in four positions, 90° apart.

Features

- Front mount for simplified mounting
- Plug-in style for ease of wiring
- Side rotary, wobble stick, cat whisker, adjustable top and top or side push styles with and without rollers
- Quick mode change to clockwise and counterclockwise operation only
- Castle lock head design for high durability

① Plug-in lever type except low-torque models.

② Temperature range below 0 °C (+32 °F) is based on the absence of freezing moisture or water. See page 5-53 for low temperature options.

③ Low operating torque-spring return ratings only.

Specifications

Enclosure Rating	NEMA 4, 13, 6P ^① and IP67
Pollution Degree	3
Certifications	UL Listed, CSA Certified CE Marked for applicable directives
Ambient Temperature [C (F)] ^②	-18...+110° (0...+230°) Exception: Wobble stick and cat whisker devices are rated from -18...+54° (0...+130°)

AC Contact Rating (Maximum per Pole, 50 or 60 Hz, 2 Circuits Same Polarity)

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
A600 AC-15	120	60	6.00	10	7200	720
	240	30	3.00	10	7200	720
	480	15	1.50	10	7200	720
	600	12	1.20	10	7200	720
B600 ^③ AC-15	120	30	3.00	5	3600	360
	240	15	1.50	5	3600	360
	480	7.5	0.75	5	3600	360
	600	6	0.60	5	3600	360

AC Contact Rating (Maximum per Pole, 50 or 60 Hz, 4 Circuits Same Polarity)

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
A300	120	60	6.00	10	7200	720
	240	30	3.00	10	7200	720

DC Contact Rating (Maximum per Pole)

Circuits	Voltage Range	Current Rating
2	115-125	0.4 A
	230-250	0.2 A
	550-600	0.1 A
4	115-125	0.4 A
	230-250	0.2 A

Plug-in Style

Lever Type • Spring Return page 5-42
Standard and Low Operating Torque Models

Lever Type • Maintained ... page 5-44
Contact and Neutral Position

Push Type • Spring Return . page 5-45

Wobble Stick and Cat page 5-47
Whisker • Spring Return

Modifications and page 5-53
Accessories

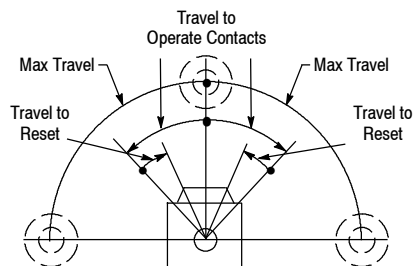
802T Operating Levers

Lever Selection page 5-130

802T Lever Type • Spring Return

Plug-in Style Oiltight Switches

Range of Operation

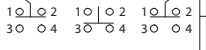
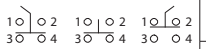
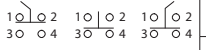
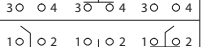
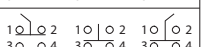
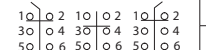
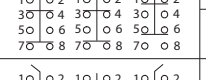
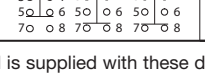



Switch
Without Lever



Switch Without
Lever and Base

Product Selection—Standard and Low Operating Torque Models

Number of Circuits	Lever Movement vs. Contact Operation		Torque/Force to Operate, Max.	Travel to Operate Contacts, Max.	Max. Travel	Travel to Reset Contacts, Max.	Cat. No.			
							Switch w/o Lever	Switch w/o Lever and Base		
2	Clockwise or Counterclockwise		0.29 N•m (2.6 lb•in) Nominal	13°	90°	7°	802T-AP	802T-AP1		
				18°			★ 802T-A5P	★ 802T-A5P1		
			0.56 N•m (5 lb•in)	5° Nominal		2.5° Nominal	802T-FP	802T-FP1		
				9°		4°	802T-HP	802T-HP1		
	Clockwise		0.29 N•m (2.6 lb•in)	13°		7°	802T-A1P	802T-A1P1		
				18°			★ 802T-A3P	★ 802T-A3P1		
			0.56 N•m (5 lb•in)	9°			4°	802T-H1P	802T-H1P1	
	Counterclockwise		0.29 N•m (2.6 lb•in)	13°		7°	802T-A2P	802T-A2P1		
				18°			★ 802T-A4P	★ 802T-A4P1		
			0.56 N•m (5 lb•in)	9°			4°	802T-H2P	802T-A2P1	
	Clockwise or Counterclockwise		0.16 N•m (1.5 lb•in)	13°		7°	802T-ALP	802T-ALP1		
							† 802T-AL1P	† 802T-AL1P		
							802T-AL2P	802T-AL2P		
Clockwise										
Counterclockwise										
4	Clockwise or Counterclockwise		0.45 N•m (4 lb•in)	13°	90°	7°	802T-ATP	802T-ATP1		
				9°		4°	802T-HTP	802T-HTP1		
			0.45 N•m (4 lb•in)	13°		7°	802T-A1TP	802T-A1TP1		
				9°		4°	802T-H1TP	802T-H1TP1		
	Clockwise		0.45 N•m (4 lb•in)	13°		7°	802T-A2TP	802T-A2TP1		
				9°			3.5°	802T-H2TP	802T-H2TP1	
			0.79 N•m (7 lb•in)							
			Counterclockwise				0.45 N•m (4 lb•in)	13°		
								9°		

★ Fluorinated elastomer shaft seal is supplied with these devices.

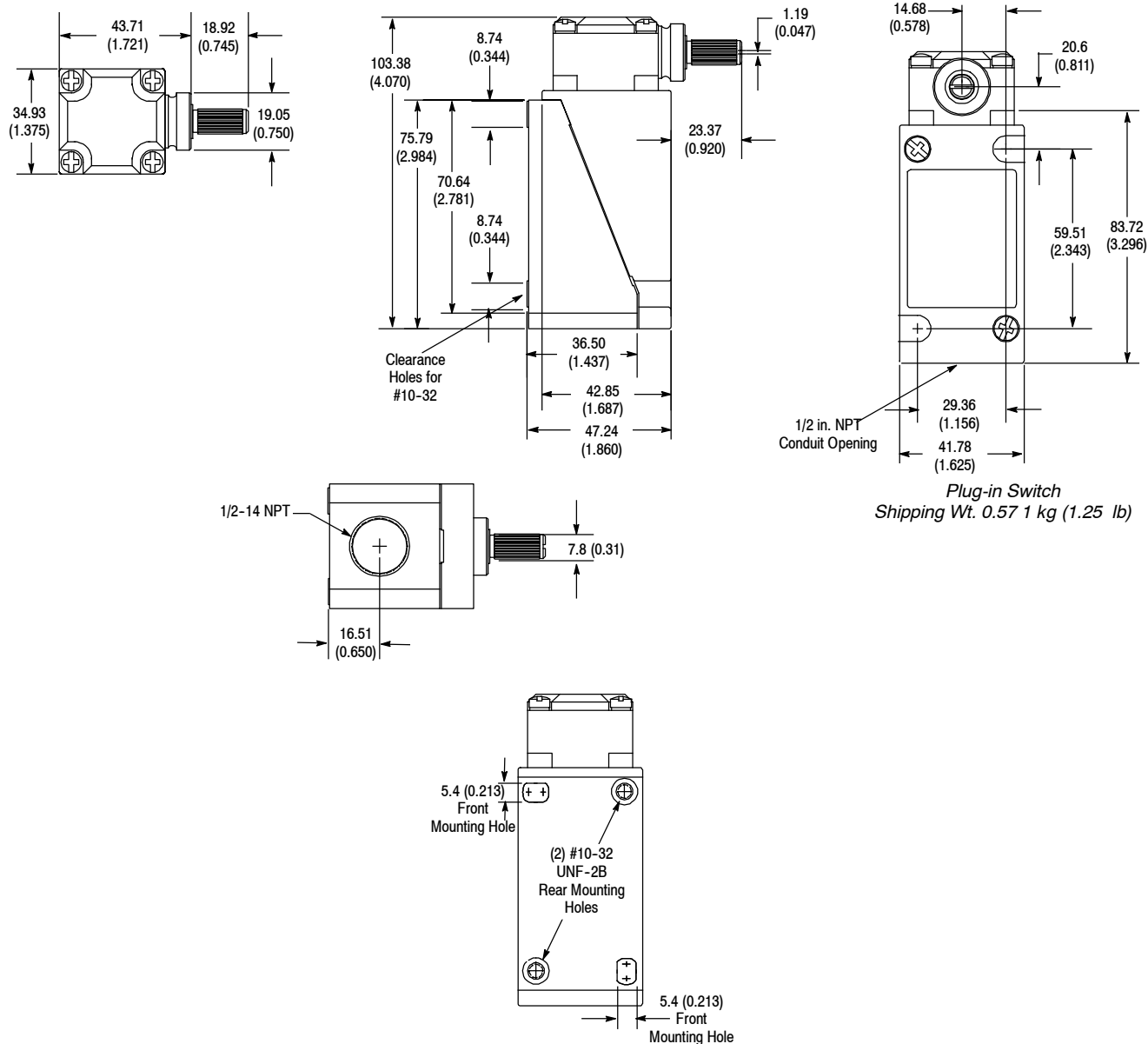
† Low operating torque model.

Approximate Dimensions—See page 5-43.

Levers—See page 5-130 for a complete listing of operating levers.

Modifications and Accessories—See page 5-53.



802T Lever Type • Spring Return**Plug-in Style Oiltight Switches****Approximate Dimensions [mm (in.)]**

Levers—See page 5-130 for a complete listing of operating levers.

Modifications and Accessories—See page 5-53.

802T Modifications and Accessories

Plug-in Style Oiltight Switches

Manifold
MountIndicating
Light

Manifold Mount

All two-circuit plug-in limit switches can be supplied with a special terminal base which permits mounting the switch manifold style on a machine base, panel or raceway. As shown above, this base is supplied with a wiring hole and gasket on the back.

To order a manifold mount switch, add the letter **U** to the listed cat. no..
Example: Cat. No. 802T-AP becomes Cat. No. 802T-APU.

Indicating Light

Bulletin 802T two-circuit plug-in limit switches (except for the cat whisker, wobble stick, and manifold mount devices) can be supplied with an indicating light. To order add the letter **N** for 120V AC, 50/60 Hz or **N5** for 240V AC 50/60 Hz. Example: Cat. No. 802T-AP becomes Cat. No. 802T-APN.

The indicating light is internally connected to two isolated terminals in the base assembly allowing the user to wire the light to either the N.O. or the N.C. contact. Switches with an indicating light have a contact rating of NEMA A300.

Where an indicator light and a pre-wired 5-pin mini connector are used, the light is pre-wired to the N.C. contact with J1 wiring and to the N.O. contact with J9 wiring. Indicating lights are not available on 4-circuit 802T switches.

Fluorinated Elastomer Seals

To order limit switches with all fluorinated elastomer seals, add the letter **V** to the end of the listed cat. no. Not available on manifold mount, low operating torque, low temperature or limit switches with an indicating light.

To order lever type limit switches with the fluorinated elastomer shaft seal only, add **V1** to the end of the listed cat. no.

Base Assembly

The limit switch base, including the terminal block, is available as a separate unit per the following table.

	Cat. No.
2-Circuit Base	802T-X7
2-Circuit Base with Indicating Light	802T-X7 N
2-Circuit Manifold Mount Base	802T-X7U
4-Circuit Base	802T-X8

Low Temperature Operation

Plug-in limit switches are designed to operate in an ambient temperature range of -18...+110°C (0...+230°F), -18...+54°C (0...+130°F) for wobble stick and cat whisker. Special limit switches modified for low temperature operation at -40...+110°C (-40...+230°F) are available. Temperature ranges below 0°C (+32°F) are based on absence of freezing moisture or water. To order, add the letter **E** to cat. no. **Not available** on wobble stick, cat whisker or pre-wired cable switches; standard on low torque and maintained devices.

Pre-Wired Cable

To order factory installed pre-wired type "**STOOW-A**" cable for 2-circuit (5-conductor) and 4-circuit (9-conductor) switches, add the suffix **Y** plus the number of feet required. Example: To order an 802T-AP with 2.4 m (5 ft) of cable the cat. no. would become 802T-APY5.

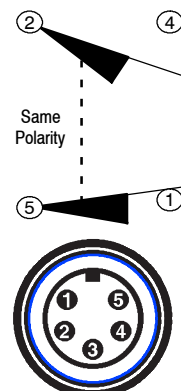
The standard cable length is 2.4 m (5 ft). Extended cable lengths are available in multiples of 1.22 m (4 ft) only.

Mini-Type Receptacles

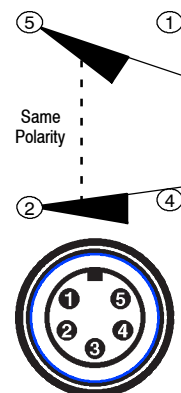
To order a bulletin 802T pre-wired limit switch with a five-pin (2 circuit) or nine pin (4 circuit) mini connector, add the suffix **J1** or **J9** depending on desired wiring (J9 wiring not available for 4-circuit models).

5-Pin Mini-Type Receptacle

"J1" Wiring



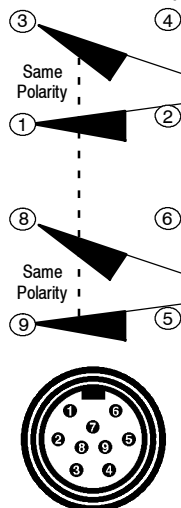
"J9" Wiring



An appropriate female connector with cable (889N-F5AFC-6F) is available on page 8-4 in Connection Systems.

9-Pin Mini-Type Receptacle

"J1" Wiring ("J9" wiring not available for 4 circuit)



An appropriate female connector with cable (889N-F9AF-2) is available on page 8-14 in Connection Systems.